

Appl. No. 08/853,007
Amtd. Dated Oct. 23, 2003
Reply to Office action of Jul. 28, 2003

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows.

1. (previously presented) A process for producing alkyl aromatic compounds which comprises contacting benzene with at least one of polyisopropylbenzene or polyethylbenzene under transalkylation reaction conditions and in the presence of a transalkylation catalyst to provide an alkylated aromatic product possessing at least one alkyl group derived from said polyisopropylbenzene or polyethylbenzene, said catalyst comprising a binder-free molecular sieve having an X-ray diffraction pattern that includes the lines set forth in Table A.

2-8 (cancelled)

9. (previously presented) The process of Claim 1, wherein the transalkylation reaction conditions include a temperature of between about 160°C and 270°C, a pressure of about 1 to 70 atmospheres, a total space velocity, WHSV, of from about 1 to 20 and a molar ratio of benzene to polyisopropylbenzene or polyethylbenzene of from about 0.1:1 to 50:1.

10. (cancelled)

11. (new) A process for producing alkyl aromatic compounds which comprises contacting at least one aromatic compound with at least one transalkylating agent possessing at least one aliphatic group having from 1 to 5 carbon atoms under transalkylation reaction conditions and in the presence of a transalkylation catalyst to provide an alkylated aromatic product possessing at least one alkyl group derived from said transalkylating agent, said catalyst comprising a binder-free molecular sieve having an X-ray diffraction pattern that includes the lines set forth in Table A.

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12. (new) The process of Claim 11, wherein the binder-free molecular sieve has an X-ray diffraction pattern that includes the lines set forth in Table B.

13. (new) The process of Claim 11, wherein binder-free molecular sieve has an X-ray diffraction pattern that includes the lines set forth in Table C.

14. (new) The process of Claim 11, wherein the binder-free molecular sieve has an X-ray diffraction pattern that includes the lines set forth in Table D.

15. (new) The process of Claim 11, wherein the transalkylation reaction conditions include a temperature of between about 160°C and 270°C, a pressure of about 1 to 70 atmospheres, a total space velocity, WHSV, of from about 1 to 20 and a molar ratio of aromatic compound to transalkylating agent of from about 0.1:1 to 50:1.

16. (new) A process for preparing short chain alkyl aromatic compounds which comprises contacting at least one aromatic compound with at least one transalkylating agent possessing at least one aliphatic group having from 1 to 5 carbon atoms under transalkylation reaction conditions and in the presence of a transalkylation catalyst to provide an alkylated aromatic product possessing at least one alkyl group derived from said transalkylating agent, said catalyst comprising binder-free MCM-22, MCM-36, MCM-49 or MCM-56, or a binder-free molecular sieve comprising oxides of aluminum, silicon and phosphorus.